

ABSTRACT

A pilot extract section 14 extracts a pilot signal from received signal. An adder 21 in-phase adds a plurality of correlated values of pilot signals for respective subcarriers. Delay devices 201-1 to 201-6 temporarily maintain one in-phase added value. Multiplier 202-1 to 202-6 multiplies a predetermined coefficient to the in-phase added value that is output from the delay device. The predetermined coefficient reflects the result, which is obtained by correcting for multiple times the difference of channel variation in the different subcarriers that is generated when noise power per one subcarrier is calculated. Each of the multiplying results is added by an adder 24, and is squared by a square device 25. A cumulative adder 26 cumulative-adds the squared values for the whole subcarrier. A multiplier 203 averages by multiplying predetermined values to the cumulative-added values. Having such configuration, even if the correlation between adjacent subcarriers becomes lower by frequency selective fading, the accuracy for estimating noise power can be improved.